

of the Gresham Life Assurance Company, a position formerly held by his father. He was also a skilled musician. He was widely known and respected, and the news of his sudden death was received with feelings of deep regret. He leaves a widow and one son.

He was elected a Fellow of the Society 1875 February 12.

THOMAS WEIR was born at Greenock in 1843, and educated at the Highlanders' Academy in that town. He was trained as an engineer with the Greenock Foundry Company. He afterwards came to England and was for some time manager in an engineering firm, subsequently joining the staff of the Vulcan Boiler and General Insurance Company, in whose service he remained till his death.

From his youth Mr. Weir was an ardent student of science, particularly of astronomy, which became his hobby and monopolised most of his spare time. He was one of the original members of the British Astronomical Association, and acted as Honorary Secretary of the North-Western Branch from its inception till it was merged in the Manchester Astronomical Society, of which he was elected the first honorary member.

Mr. Weir joined the solar eclipse expedition to Vadsö in Norway in 1896, and also that to Plasencia in Spain in 1900. On both occasions he made some excellent drawings and diagrams, which were used to illustrate several interesting and instructive lectures he delivered in and around Manchester.

In 1902 Mr. Weir was overtaken by paralysis, and, never recovering his strength, was compelled to relinquish the active part he had taken in furthering the interests of the science to which he was so devoted. After a long and painful illness, he gradually sank and died on 15th February 1908, in the sixty-fifth year of his age.

He was elected a Fellow of the Society 1899 February 10.

WILLIAM EDWARD WILSON was born in 1851, and was the only son of Mr. John Wilson, of Daramona, Westmeath. In consequence of delicate health he was educated at home, and soon evinced a taste for astronomy. He took part in the Expedition to Oran to observe the total solar eclipse of 1870 December 22, and the following year he set up for himself a private observatory in his father's grounds at Daramona. This he equipped with a 12-inch reflector by Grubb. In 1881 he erected a larger observatory, which contained a fine and well mounted reflector of 2-feet aperture. A physical laboratory and a mechanical workshop were added in 1889, and in 1891 the telescope was remounted and furnished with electric control for astronomical photography. With this he obtained a great number of astronomical photographs, amongst which may be specially mentioned the great nebula in Orion, the annular nebula in Lyra, the spiral nebula in Canes Venatici, and the globular cluster M 13 in Hercules. All these, with several

others, are reproduced in the Society's series of astronomical photographs.

One of his most important memoirs was entitled "Experimental Investigations on the Effective Temperature of the Sun"; in this he found that the effective temperature could not differ much from  $8000^{\circ}$  C. In a second paper on the same subject, taking the lowest estimate of terrestrial atmospheric absorption, and correcting for solar atmospheric absorption, the value finally reached is  $6590^{\circ}$  C. Other important publications were on "The Absorption of Light in the Solar Atmosphere"; "The Temperature of the Carbons in the Electric Arc"; "The Effect of Pressure of the Surrounding Gas on the Temperature of the Crater of an Electric Arc Light"; "Radiation from a Perfect Radiator"; "The Thermal Radiation from Sun-spots." In the last-mentioned paper he arrives at the conclusion that a sun-spot is not a cool, depressed region, but rather a more intensely heated one, raised above the photosphere. The papers published before 1900 were re-issued in a volume called "Astronomical and Physical Researches made at Mr. Wilson's Observatory, Daramona, Westmeath." This was illustrated with some of his celestial photographs. He observed the total solar eclipse of 1900 May 28 at Placencia (Spain), and his results were published in the *Transactions* of the Royal Irish Academy and the Royal Dublin Society.

Dr. Wilson married in 1886 Caroline Ada, daughter of Captain R. C. Granville, of Grand Pré, Biarritz, who survives him. He leaves also a son and two daughters.

He was elected a Fellow of the Royal Society in 1896, and received the honorary degree of D.Sc. from Dublin University in 1901. He became a fellow of the Royal Astronomical Society 1875 December 10.

CARL VENCESLAS ZENGER was born 1830 December 17 at Komotau, Bohemia, and educated at the University of Prague. From 1851 to 1853 he was an Assistant at the Observatory; in 1853 he was appointed Professor in the Gymnasium at Neusohl, Hungary. In 1861 he returned to Prague as Professor of Physics in the Polytechnic Institute. In 1864 he was appointed an ordinary Professor at the Technical High School, of which in 1872 he became Rector. In 1899 he became Emeritus Professor of Astrophysics. He was a voluminous writer on Meteorology, Spectroscopy, and Astronomy. The majority of his papers appeared in the *Comptes Rendus*, and in the Journal of the Prague *Wissenschaftliche Gesellschaft*, but he contributed also a few to the *Monthly Notices* and to the *Philosophical Magazine*. He died January 22nd, 1908.

Professor Zenger was elected a Fellow of the Society 1875 June 11.

JOHN MACON THOME was born at Palmyra, Pennsylvania, U.S.A., on August 22, 1843. He received a college education, and in 1870 took the degree of D.Sc. at the Lehigh University. In 1870 Dr. B. A. Gould was appointed by the Argentine Government to